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Integrating geographic information systems, spatial digital libraries and information spaces for conducting humanitarian assistance and disaster relief operations in ...

V Kumar, A Bugacov, M Coutinho... - Proceedings of the 7th ..., 1999 - portal.aom.org

... Their common element is the need to help a **group** develop and maintain their understanding ...

In certain applications, the registration of incidents or events may play an important role in ... The sizes of the blue circles are proportional to the number of **documents** found referencing ...

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Visualisation of entity distribution in very large scale spatial and geographic information systems

J Komzák... - Milton Keynes. The Open University, 2001 - komzak.webz.cz

... Hard copy maps, aerial photographs, remotely sensed images, reports, survey **documents** usually serve as the ... it will be possible to work only with the intersection of **relevant** subtrees in ... according to long time observation of client behaviour and creation of **groups** - typical client ...

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Knowledge Media Institute

J Komzák... - 2001 - Citeseer

... The spatial nature of data is important in geographic and spatial information systems. ... Next possible **group** of analysis is provided by expert systems or system for support of decision making. ... The application displays **documents** downloaded from different servers. ...

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GeoSearcher: Location based ranking of search engine results

C Walters... - Journal of the American Society for ..., 2003 - Wiley Online Library

... Geo-referenced Information Processing System) is a system that extracts geographical index terms from **documents** (Woodruff and ... for North American readers but we determined that this would not likely be **relevant** in a ... Finally, the third **group** had sites with errors in the URL. ...

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GIS and public health

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... practical concerns, the authors cut straight through the jargon to emphasize **relevant** applications in ... 267 Incorporating Normative Models of Facility Location and Service Delivery into GIS 279

Spatial ... Census identifiers for tracts, block **groups**, and blocks are unique 90 onh in the ...

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Extracting spatial knowledge from the web

Y Morimoto, M Aono, ME Houle... - Applications and the ..., 2003 - ieeeexplore.ieee.org

... wi in the j-th document dj, and df i is the num- ber of **documents** in which the ... clustering method based on text data drawn from web pages should take into account the following ... As both considerations are equally important, these proportions should be accounted for separately. ...

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Data analysis for a multimedia library

A Hauptmann, R Jin... - Text and Speech-Triggered Information ..., 2003 - Springer

... Under the heading of "**grouping**", we would like to recognize the text flow on a ... Page formatting can be important, as newspapers may have multiple articles on one page ... the TREC evaluations, experiments have shown that information retrieval on **documents** recognized through ...

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GIS and disease

EK Cromley - Annual Review of Public Health, 2003 - annualreviews.org

... science, social science, and geographic information science, conference proceedings, government **documents** from all ... with asthma in 1993 were compared to a random control **group** of children ...

For most GIS applications, these spatial units are not **relevant** to the geographical ...

Cited by 64 - Related articles - BL Direct - All 3 versions

Empowerment, marginalization and public participation GIS

W Craig, T Harris... - Report of a Specialist Meeting Held Under ..., 1999 - Citeseer

... Maine, it was proposed that the idea of PPGIS should be incorporated into the new ... As result, a core planning **group** and co-leaders was established and a proposal to ... All participants recognized that this initiative was important for understanding 'geographies of the information ...

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Snow cover mapping with NOAA-AVHRR images in the scope of an environmental GIS project for the Russian Altai (South Siberia)

E Höppner... - Proc. of the ICA Comm. on Mountain ..., 2002 - Citeseer

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... diverse **documents** and field survey ... wild goat species of the alpine elevation belt (Capra i ibex L. in the Alps) it has been shown, that insolation (also via its influence on snow depletion) is an important factor to me ... conversion of radiance values **into** brightness temperature values ...
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Giuseppe Pozzi, Letizia Tanca and Luca Tosi Politecnico di Milano, Italy
F Schreiber, VDA AlbertoBelussi. . - Web-enabled systems . , 2003 - books.google.com
... access demands can be supportedby the DEAFIN system towards a variety of user **groups**. ... system, apto manage and provide access to all the regional **relevant** information in ... to external DBMSs, • the system shouldbe ableto handle and generate XML **documents**, • the system ...
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S CDC... - PUBLIC HEALTH, 2000 - Citeseer
... Data collected through NHANES are vitally important and have informed policy and research in many ... and county of residence; year of death; race (white, black, other); sex; age **group** at death ... is composed of over 450 individual Landsat 7 satellite scenes mosaicked **into** a single ...
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JG Lyon... - 1995 - books.google.com
... Preface The Mapping Sciences Series of books was conceived to serve important needs in ... These three **documents** focused on remote sensor and **GIS** technologies for evaluation of riverine ... Conclusions 227 Chapter 16 Incorporation of Real-Time Environmental Data **Into** a **GIS** ...
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GIS Developing Regional - 2000 - greatvalley.org
... 1999.) All of the issues identified by residents as the most important matters facing ... Land Systems **Group**, 395 Del Monte Center #150, Monterey, California 93940, 831-633-6445 or 831 ... **GIS** Advisory Board was organized to counsel the study process, to review **documents**, and to ...
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ST Gershman - 1997 - DTIC Document
... Where material from **documents** designated for limited distribution is quoted, permission has been ... well documented, yet difficult to explain after taking **into** account important confounders such ... They were categorized by gender and five-year age **groups** for each Massachusetts ...
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F Wang - 2002 - eidr.wvu.edu
... 33 Figure 3.1 Three main forest management **groups** in the study area..... 35 ... Forest management must take **into** account the small scale (Sachs et al. 1998). More and ... **relevant** in all situations (USGS Biological Resources Division 1999). The species that ...
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... Billions of gallons of fresh water continually flow from the Kissimmee River and Lake Okeechobee **into** the Everglades. ... short period relative to geologic time frames. It is also important to note that the increased population, largely comprising ... These **groups** are ...
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Environmental Systems Research Institute (Redlands - 1999 - books.google.com
... Books from ESRI Press are available to resellers worldwide through Independent Publishers **Group** (IPG ... Chapters Getting data **into** ArcView G/S 8-1 Understanding data sources 8-2 Adding ... The systems do differ in a number of important ways: how they link geographic locations ...
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[BOOK] Computational science and its applications-ICCSA 2003: proceedings
P L'Euyer, CJK Tan, ML Gavrilova... - 2003 - books.google.com
... in Spatial Analysis within **GIS** A Variable Resolution Approach to **Cluster** Discovery in ... Computer-Aided Geometric Design Solving Geometric Constraints Invariant Modulo the Similarity **Group** Seed, DER Clark, R. Ocone, XY Yang Partitioning Polygons **into** Tree Monotone ...
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... one's understanding of SAR imagery and processing. It is a very useful contribution, however, to those more familiar with these increasingly **important** data and does ...
K GmbH - 1994 - Wiley Online Library
... The third **group** of chapters, 13, 14, 15 and 18 may be described as ... it is important to define the nature of good results and the methods used to ... more esoterically, the transformation of Mackaness's rose diagrams describing a map's components **into** "thermometers" representing ...
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TW Sanchez, N Bania ... - Transportation Northwest Regional ... , 2002 - transnow.org
... Thomas W. Sanchez Center for Urban Studies, Transportation Research **Group** Portland State University, Portland ... areas **into** the suburbs, essentially reversing the traditional public transportation patterns. ... **GIS** is an important technology that is increasingly being used to support ...
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... Furthermore, you would have to do that by hand, by fetching and navigating Web **documents**, copying the price ... At the Institute of Information Systems, Database and Artificial Intelligence **Group** on the Vi-enna university of ... Lixto translates **relevant** parts of Web pages **into** XML. ...
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[Travel time studies with global positioning and geographic information systems: an integrated methodology](#)
CA Quiroga... - Transportation Research Part C: Emerging ... , 1998 - Elsevier
... It **documents** the data collection, data reduction, and data reporting procedures, as well as ... For discussion purposes, these techniques can be **grouped into** two categories: roadside techniques and ... This is particularly important if there are interchanges or intersections along the ...
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[Search and retrieval system of transportation-related flexibly defined paths](#)
PD Cappellini - US Patent App. 20,030/014,266, 2002 - freepatentsonline.com
... [0086] Transport Path Attributes—A **group** of attributes ... total, or partial part of the route that has been input as a planned itinerary by the service provider **into** the system. ... 0105] Generation (G)—An attribute used to describe the vectors, waypoints or waypoint attributes **relevant** to a ...
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[The Nature of Geographical Data](#)
M Monmonier - Bringing geographical information systems into ... , 2000 - books.google.com
... In organizations, it often becomes embedded not only in **documents** or repositories but also in ... In addition to data availability, copyright, price, and data format are important issues to consider in ... The purpose of this **group** is to help users and suppliers to implement the new ...
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R Batra - 1999 - books.google.com
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A Campbell, J Goentzel... - Production and ... , 2000 - Wiley Online Library
... One class member from each **group** worked on the project during the next quarter to get the ... Appendices C and D). The data sets for the case studies are Microsoft Excel **documents** and do ... vehicle, and driver (if any) were involved in the most recent event and **relevant** volumes. ...
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D Osborne, ... - 2003 - books.google.com
... In June 2000, a **group** of intelligence trainers and intelligence leaders from around the world ... in the present and the tactical crime analyst must be flexible in producing **relevant** crime analysis ... doors standing open for long periods of time, inviting burglars to walk **into** the structure ...
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JE Dobson... - 1995 - csc.noaa.gov
... believe we have made a significant step in addressing an important coastal issue ... conjunction with global positioning system systems, and geographic information system (**GIS**) technology to ... from a series of professional workshops and interagency working **group** meetings which ...
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D Martin - 1996 - books.google.com
... Many of the concepts and principles introduced here are **relevant** to all **GIS** users, but the ... data at conventional geographic scales of measurement Means of linking items of attribute information **into** some spatial ... National Health Service (UK) National Joint Utilities **Group** (UK) xix ...
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GD Garson... - 1992 - books.google.com
... The rest of the agency will be very happy to know that the **group** is involved in the new technology, but equally ... In particular, it is important in mapping that common borders be maintained so that "slivers" do not appear (small gaps or ... Features are organized **into** layers in a **GIS**. ...

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MR English, JH Peretz ... - 1999 - [eric.ed.gov](#)

... The growth plan must include, at a minimum, **documents** describing municipal corporate limits as well as urban growth boundaries ... In addition, however, others may or should play an important role. ... (5) The cost of the process may be covered by fees charged to member **groups**. ...

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[Real-time insurance policy underwriting and risk management](#)

SC Kumar, DN Dymaas ... - US Patent App. ..., 2003 - [freepatentsonline.com](#)

... takes considerable time for the **GIS** operator to provide a list of **relevant** existing policies ... data (eg, converting Tagged Image File Format (TIFF) to Joint Photographic Expert **Group** (JPEG) format ... Although not shown, other types of data may also be input **into** the enterprise spatial ...

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[The State of Government Cartography in 1998](#)

JL Morrison - Journal article by Joel L. Morrison; Cartography and ..., 1999 - [questia.com](#)

... Linux. **Documents**. The **group** has produced a RFC for integrating geographic support **into** VRML as well as a proposal for introducing double-precision floating-point support to better represent geographic coordinates. Greg ...

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[The National Science Foundation National Center for Geographic Information and Analysis](#)

FA RONALD - International Journal of Geographical Information ..., 1987 - Taylor & Francis

... technology and examines it from the standpoint of technology and society will identify important obstacles to ... Divisions are in turn **grouped into** Directorates, of which there are seven ... of the Center's activities were similar to those contained in the Dobson **documents**, accompanied by ...

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CE Bowers - 2000 - DTIC Document

... goods or services 48 Entitled goods or services 57 Summary 58 Chapter 4: Application: Using **GIS** for locational ... Travel choice is equally important. ... long recognized as a planning consideration, the concept of accessibility has rarely been translated **into** performance measures ...

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... Field data collected by community-based **groups** are incorporated **into** the City's database to ... information public, creating data integrity through feedback loops, and generating important data-sharing ... Talen, "Bottom-Up **GIS**: A New Tool for Individual and **Group** Expression in ...

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... Humanities in Australia **into** the 21st Century, 3 vols, Prepared by a Reference **Group** for the ... primarily by the desire of the researcher to push an unasked question, an important issue or ... careers hunched for hours at a time over their accumulation of books and **documents** in the ...

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... These written **documents**, developed in partial collaboration with Robert Austin, served as the base for ... absorbed and changed **into** other forms of energy; processes involving energy are important in satellite ... acronym word formed from first (or other) letters of a **grouping** of words. ...

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... contributed greatly to this area of early, manual **GIS** research and was important in introducing further work in the use of ... Peucker and Chris- man (1975) conducted some of the earliest research **into** the ... **GIS**, one of the first 'topologically complete' **GIS**. A ...

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... Decision Quality Objectives (rather than Data Quality Objectives) should be developed that are related to the specific circumstances of a site and take **into** consideration potential risks, exposure routes, and concerns. Monitoring parameter lists should be **relevant** to the ...

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... from the Unit for Human Resources Information and Planning in the HSRC's **Group** Human Resources ... The study highlighted the important contribution of **GIS**, not only as a very useful ... by the incorporation of data-mining techniques (such as neural networks) **into** spatial analyses ...
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I am Walter Kraft. I'm a Traffic Engineer. I'm an ITS Engineer. I do planning. I do operations. I do manage-ment. I do integration. I want to see what is happening on the ...
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... Government agencies are the largest potential custo- mer **group**. ... I'm going to organize my comments **into** three areas ... have been a lot of improvement and a lot of progress over the last year in the flow area, but beyond the tech- nical advancements, even more important are the ...

Method, system, and program for an improved enterprise spatial system
TA Von Kaenel, DN Dymaess .. - US Patent App. ..., 2003 - freepatentsonline.com
... 201 to contain the logic to convert and, possibly, combine raw spatially referenced data **into** viewable data ... 0022] Yet another problem is that Geographic Information Systems (**GIS**) require data ... same application need to be run, each working with a different set or **grouping** of data ...
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M Gruteser, D Grunwald - ... of the 1st international conference on ... 2003 - portal.acm.org
... To be effective, the location anonymizer requires location-based services that are used with ... on a Java server platform and evaluated them using automotive traffic simulations based on US ... transportation network information at the city level in the Spatial Data Transfer Standard ...
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M Ester, HP Kriegel, J Sander, ... on Knowledge Discovery and Data ... 1996 - aaai.org
... from the US Geological Survey's Geographic Names Information System, together with their location. ... Clustering algorithms are attractive for the task of class identification in spatial databases. ... the clustering algorithm DBSCAN which relies on a density-based notion of ...
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... distance is chosen as the value of Eps and the resulting clustering quality is ... The distribution type is still NORMAL based on the following: Since there are 210 points ... AND price RANGE (150000, 300000) WITH PERCENT (0.7, 1) AND AREA (100, ∞) AND LOCATION California ...
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J Sander, M Ester, HP Kriegel, ... Data Mining and Knowledge ... 1998 - Springer
... is possible, ie, performing a selection "on the fly" while clustering the database. ... the selection first under certain circumstances because GDBSCAN can use existing spatial index structures ... define density-connected sets, analogously to the definition of density-based clusters in ...
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G Sheikholeslami, S Chatterjee, ... The VLDB Journal, 2000 - Springer
... WaveCluster: a wavelet-based clustering approach for spatial data ... All the grid-based approaches for clustering spatial data suffer from the modifiable areal cell problem (MAUP) first addressed by Openshaw in 1977, and Openshaw and Taylor in 1981 [Ope77, OT81]. ...
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A Dasgupta, ... Journal of the American Statistical Association, 1998 - JSTOR
... practice; see Muise and Smith (1992).] A similar problem that we also consider is to determine the location of seismic ... 2. METHODOLOGY 2.1 Model-Based Clustering Banfield and Raftery (1993) proposed a method for model-based clustering of d-dimensional data based on a ...
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... Let $u_i = (w_i, 0z_i, \dots, v_d)$ denote a unit in the original feature space where $v_i, 1 \leq i \leq d$, is the location of the unit on the axis X_i of the feature space. ... The label of each unit is determined based on the labels of its neighboring units [Hor88]. ... Clustering Arbitrary Shapes ...
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... 3. M. Ester, HP Kriegel, S. Sander, and X. Xu. A density-based algorithm for discovering clusters in large spatial databases with noise. ... Mining spatial data via clustering. Technical Report #5/97, FIT, QUT, Brisbane 4000, Australia, 1997. ... Location-allocation for small computers. ...
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... as shown in Figure 3.2(c). Other contiguous matrices can be designed to model neighborhood relationships based on distance ... studies of four important output patterns for spatial data mining: predictive models, spatial outliers, spatial co-location rules, and spatial clustering. ...
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A Malmberg... - Environment and Planning ..., 2002 - environmentandplanning.com
... A knowledge-**based** approach to the theory of **spatial clustering** As we see it, a satisfactory theory of **spatial clustering** must be ... colocated but which are not available to a hypothetical single firm carrying out precisely the same activities, even at the same **location**, using the ...
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V Estivill-Castro... - Algorithmica, 2001 - Springer
... Since C and C differ on only one point, with appropriate structures for point **location**, O(n log k) steps are sufficient to find rep[s, C] for all s S (rep[s, C] is either unchanged or the new ... Robust Distance-**Based Clustering** with Applications to **Spatial Data Mining** 223 ...
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V Estivill-Castro, AT Murray - ... of the International ICSC Symposium on ..., 1997 - Citeseer
... Our results open the possibility for even more competitive genetic search for medoid **based clustering**. 7 Acknowledgments ... Page 11. **Spatial Clustering for Data Mining** with a GA ... 1] G. Bianchi and R. Church. A non-binary encoded genetic algorithm for a facility **location** problem. ...
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Autoclust+: Automatic clustering of point-data sets in the presence of obstacles
V Estivill-Castro... - Temporal, **Spatial**, and Spatio-Temporal Data ..., 2001 - Springer
... includes the number of clusters that reside in P (note that some **clustering** methods are ... tion rather than providing it), extent, scatter and size of each cluster, **location** in **spatial** ... Type II information includes causal factors and potential explanations **based on data** in other layers ...
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AK Jain, MN Murty... - ACM computing surveys (CSUR), 1999 - portal.acm.org
... The field of **spatial** analysis of point pat- terns [Ripley 1988] is also related to cluster ... A review of image segmentation by **clustering** was reported in Jain and Flynn [1996 ... Com- parisons of various combinatorial opti- mization schemes, **based** on experi- ments, have been reported ...
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T Zhang, R Ramakrishnan... - ACM SIGMOD Record, 1996 - portal.acm.org
... Soj it is still unable to scale well with large N. **Clustering** has been recognized as a useful **spatial data** mining method recently. [NH94] presents ('L,4BAN,\$ that is **based** on randomized search, and proposes that ('LARAN,\$ outperforms traditional **clustering** al- ...
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J Han, K Koperski... - ACM SIGMOD Record, 1997 - portal.acm.org
... relational databases contain **spatial** information as well, such as the residence of a customer or the **location** of a ... Concept hierarchies can be created by users or domain experts, but also generated automatically **based** on value distribution or some **clustering** algorithms. ...
Cited by 165 - Related articles - EEL Direct - All 21 versions

Fast approximations for sums of distances. clustering and the Fermat-Weber problem* 1
P Bose, A Maheshwari... - Computational Geometry, 2003 - Elsevier
... 7. Estivill-Castro and Houle , Robust distance-**based clustering** with applications to **spatial data** mining. Algorithmica 30 2 (2001), pp. 216–242. Full Text via CrossRef | View Record in Scopus |
Cited By in Scopus (13). 8. RL Francis Facility Layout and **Location**: An Analytical ...
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Constraint-based clustering in large databases [\(PDF\) from unifi.it](#)
A Tung, J Han, L Lakshmanan... - Database Theory—ICDT 2001, 2001 - Springer
... **Clustering** methods can be categorized into partitioning methods [KR90, NH94], hierarchical methods [KR90 ... methods [EKSX96], grid-**based** methods [WYM97,AGGR98], and model-**based** methods [HaKa00]. ... somewhat similar to the CC problem is the facility **location** pro- blem ...
Cited by 124 - Related articles - EEL Direct - All 12 versions

Mining frequent neighboring class sets in spatial databases
Y Morimoto - ... conference on Knowledge discovery and data mining, 2001 - portal.acm.org
... for finding important **spatial** pattern called frequent neighboring class sets from **spatial** databases. ... sets are not just clusters that can be found by conventional **clustering** algo- rithms ... class sets can be utilized for many applications such as **location-based** services, development ...
Cited by 83 - Related articles - All 2 versions

[Streaming-data algorithms for high-quality clustering](#)

[\[PDF\] from psu.edu](#)

L O'Callaghan, N Mishra, A Meyerson... - **Data Engineering**, ..., 2002 - [ieeexplore.ieee.org](#)
... CG algorithm given in Sec- tion 3.2.1, except that CG solves the facility **location** variant which is more desirable since in practice one does not know the exact number of clusters k (and facility **location** allows as ... Other types of **clustering** include density-**based** methods, eg ...
[Cited by 318](#) - [Related articles](#) - [BL Direct](#) - [All 28 versions](#)

[Spatial data mining: database primitives, algorithms and efficient DBMS support](#)

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M Ester, A Frommelt, HP Kriegel... - **Data Mining and Knowledge** ..., 2000 - Springer
... 195 Figure 1. Regions of pollution around a planned industrial plant (Bill, 1991). Figure 1 depicts a map used in the assessment of a possible **location** for a new industrial plant. ... 203 Figure 6. Illustration of a single scan **clustering**, using a distance **based** neighborhood. ...
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[An updated bibliography of temporal, spatial, and spatio-temporal data mining research](#)

J Roddick, K Hornsby... - **Spatial, and Spatio-Temporal** ..., 2001 - Springer
... Fast Randomized Algorithms for Ro- bust Estimation of **Location**. In Proc. ... Estivill-Castro, V. and Lee, I. (2000). AUTOCLUST+: Automatic **Clustering** of Point-**Data** Sets in the Presence of Obstacles. ... Discovering associations in **spatial data**-an efficient mediod **based** approach. ...
[Cited by 95](#) - [Related articles](#) - [All 7 versions](#)

[Second-order analysis of spatial clustering for inhomogeneous populations](#)

PJ Diggle... - **Biometrics**, 1991 - JSTOR
... 100 11 52 69 98 97 100 200 12 57 82 98 100 100 Our power study is **based** on 100 replicate simulations of events in A, the unit square. ... The **location** of each event is taken as the centroid of the post code of home address. ... suggests mild evidence of **spatial clustering**. ...
[Cited by 164](#) - [Related articles](#) - [All 8 versions](#)

[Model-based clustering, discriminant analysis, and density estimation](#)

[\[PDF\] from psu.edu](#)

C Fraley... - **Journal of the American Statistical Association**, 2002 - ASA
... We give examples from medical diagnosis, minefi eld detection, cluster recovery from noisy **data**, and **spatial** density estimation. Finally, we mention limitations of the methodology and discuss recent developments in model-**based clustering** for non-Gaussian **data**, high ...
[Cited by 949](#) - [Related articles](#) - [Library Search](#) - [BL Direct](#) - [All 35 versions](#)

[BIRCH: A new data clustering algorithm and its applications](#)

[\[PDF\] from psu.edu](#)

T Zhang, R Ramakrishnan... - **Data Mining and Knowledge** ..., 1997 - Springer
... 2.2. Distance-**Based** Most **data clustering** algorithms in Statistics are distance-**based** approaches. ... Hence none of them can scale up linearly with stable quality. **Data clustering** has been recognized as a useful **spatial data** mining method recently. ...
[Cited by 278](#) - [Related articles](#) - [BL Direct](#) - [All 17 versions](#)

[\[PDF\] Spatial disease clusters: detection and inference](#)

[\[PDF\] from satscan.us](#)

M Kulldorf... - **Statistics in medicine**, 1995 - satscan.us
... In this paper, we present a method that detects the **location** of possible disease clusters in a population with ... Both have been applied to disease **clustering**. One approach uses a test statistic **based** on measuring distances between the disease cases while the other is **based** on ...
[Cited by 532](#) - [Related articles](#) - [BL Direct](#) - [All 8 versions](#)

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HJ Miller... - 2001 - [books.google.com](#)
... between 2-D image and feature space 183 7.10 Visualization of the **clustering** result for ... 8.12 CLIQUE: Determining potential region with dense units 224 8.13 Planning the **location** of ATMs ... 9.8 Finding outliers by the speed of motion 248 9.9 Discovering outliers **based** on speed ...
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[Data mining: An overview from a database perspective](#)

[\[PDF\] from psu.edu](#)

MS Chen, J Han... - **data Engineering**, IEEE Transactions ..., 1996 - [ieeexplore.ieee.org](#)
... databases, transaction databases, object- oriented databases, deductive databases, **spatial data**- bases, temporal ... charac- teristic rules, classification rules, discriminant rules, **clustering**, evolution, and ... un- derlying **data** mining approach into generalization- **based** mining, pattern ...
[Cited by 1632](#) - [Related articles](#) - [Library Search](#) - [BL Direct](#) - [All 72 versions](#)

[Using a neural network and spatial clustering to predict the location of active sites in enzymes](#)

[\[PDF\] from uqam.ca](#)

A Guttiendge, GJ Bartlett... - **Journal of molecular biology**, 2003 - Elsevier
... Here, a neural network is trained to identify the catalytic residues found in enzymes, **based** on an ... **spatial clustering** of the highly scoring residues are then used to predict the **location** of the ... **Spatial clustering** of the network results provides a reliable way of finding likely active sites ...
[Cited by 126](#) - [Related articles](#) - [All 15 versions](#)

[\[PDF\] AMOEBA: Hierarchical clustering based on spatial proximity using Delaunay diagram](#)

[\[PDF\] from psu.edu](#)

V Estivill-Castro... - ... the 9th International Symposium on Spatial Data ..., 2000 - Citeseer
... of **spatial** entities is that they are correlated with each other in the sense of time, **location**, theme and ... Wang et al., 1997) and STING+ (Wang et al., 1999) also use a statistical information **based** on a ... These compact values can be used for **clustering** to draw a good approximation. ...

[Cited by 54](#) - [Related articles](#) - [View as HTML](#) - [All 2 versions](#)

[\[PDF\] X-means: Extending K-means with Efficient Estimation of the Number of Clusters](#)

[\[PDF\] from psu.edu](#)

D Pelleg... - ICML-2000, 2000 - Citeseer

... We first describe the naive K-means algorithm for producing a **clustering** of the points in the ... In case a centroid **location** changes, a new element has to be inserted and it is ... It uses **statistically-based** criteria to make local decisions that maximize the model's posterior probability ...

[Cited by 203](#) - [Related articles](#) - [View as HTML](#) - [All 23 versions](#)

[Partition based spatial-merge join](#)

[\[PDF\] from psu.edu](#)

JM Patel... - ACM SIGMOD Record, 1996 - portal.acm.org

... The study also investigates the effect of **clustering** the join inputs. ... In [Ore86, OM88], Orenstein proposes an approach **based** on approximate geometry, wherein the universe of the ... Each pixel, which is described by its **spatial location**, is transformed into a 1-dimensional domain ...

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[\[PDF\] Integrated analysis of spatial data from multiple sources: using evidential reasoning and artificial neural network techniques for geological mapping](#)

[\[PDF\] from slrs.cn](#)

P Gong - Photogrammetric Engineering and Remote Sensing, 1996 - slrs.cn

... Many **clustering** algorithms and the MLC can be applied only to **data** at ratio and interval measurement scales. ... Classification **Based** on Evidential Theory Let a vector $X = (x_1, x_2, \dots, x_n)$ denote a set of observations or measurements made at a particular **location**. ...

[Cited by 79](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)

[Exploratory spatial data analysis techniques for examining urban crime](#)

[\[PDF\] from cuny.edu](#)

AT Murray, I McCullough, JS Western... - British Journal of Criminology, 2001 - CCJS

... Information on the 99 police stations was provided by Queensland Police. Information on the **location** of the 82 fire stations was provided by Queensland Fire and Rescue Authority. ... FIG. 4 Property crimes and **spatial** features in Brisbane Page 11. Optimization-based Clustering ...

[Cited by 54](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)

[Distributed data clustering can be efficient and exact](#)

[\[PDF\] from hp.com](#)

G Forman... - ACM SIGKDD explorations newsletter, 2000 - portal.acm.org

... remote portions of the dataset over the poor connection to a central **location** for (parallel ... "K-Harmonic Means: A **Spatial Clustering** Algorithm with ... Algorithms using Sufficient Statistics for Efficient Parallel Speed-up: Demonstrated for Center-Based Data Clustering Algorithms," 4th ...

[Cited by 93](#) - [Related articles](#) - [All 29 versions](#)

[\[PDF\] Clustering algorithms for spatial databases: A Survey](#)

[\[PDF\] from psu.edu](#)

E Kolatch - PDF is available on the Web, 2001 - Citeseer

... In addition, **spatial location**, and implicit information about the **location** of an object, may be exactly the information that can be extracted through **spatial data** mining. [Fay96] ... 4.3 DBCLASD DBCLASD (Distribution **Based Clustering** of Large **Spatial** Databases) [XEKS98], is ...

[Cited by 58](#) - [Related articles](#) - [View as HTML](#) - [All 7 versions](#)

[Detecting graph-based spatial outliers: algorithms and applications \(a summary of results\)](#)

[\[PDF\] from psu.edu](#)

S Shekhar, CT Lu... - ... on Knowledge discovery and data ..., 2001 - portal.acm.org

... cost models for outlier detection queries, and compare underlying **data** storage and **clustering** methods that ... We are interested in discovering the **location** of stations whose measurements are inconsistent with those of their graph-based **spatial** neighbors and the ...

[Cited by 104](#) - [Related articles](#) - [All 22 versions](#)

[Hierarchical model-based clustering for large datasets](#)

[\[PDF\] from washington.edu](#)

C Posse - Journal of Computational and Graphical Statistics, 2001 - ASA

... Section 2 reviews the general framework of model-based **clustering**. ... Section 4 uses the MST-HMCLUST-EM approach to analyze simulated **data** and two large, real datasets ... In the latter case, local smoothers are combined with this algorithm to integrate the **spatial** information in ...

[Cited by 69](#) - [Related articles](#) - [BL Direct](#) - [All 10 versions](#)

[Knowledge-based image retrieval with spatial and temporal constructs](#)

WW Chu, CC Hsu, AF Cardenas... - Knowledge and Data ..., 1998 - ieeeexplore.ieee.org

... These computed features will be classified automatically with **clustering** algorithms into Type Abstraction Hierarchies ... of the visual entities in the query are extracted and compared **based** on the ... descriptors, such as size and roundness for the shape category, **location** for the ...

[Cited by 145](#) - [Related articles](#) - [BL Direct](#) - [All 11 versions](#)

[Local indicators of spatial association—LISA](#)

[HTML from mendeley.com](#)

L Anselin - Geographical analysis, 1995 - Wiley Online Library

... is a simple sum over the subscript i , a local Gamma index for a **location** i may ... the **data** sources, see Anselin and O'Loughlin (1992). The suggestion of **spatial clustering** of similar ... 0.002).⁶ These statistics are computed for a row-standardized **spatial** weights matrix **based** on first ...

[Cited by 2012](#) - [Related articles](#) - [All 10 versions](#)

[Spatial clustering for inhomogeneous populations](#)

J Cuzick... - Journal of the Royal Statistical Society. Series B (...), 1990 - JSTOR

... the moment, from all individuals at risk in 9 select at random a set of n_1 'controls' and denote

their **location** by (yl ... 1990] **SPATIAL CLUSTERING** ... General Rank-**based** Procedures The previous procedures are all **based** on the sequence of zeros and ones determined from the case ...
[Cited by 304](#) - [Related articles](#) - [All 2 versions](#)

[Improved ant-based clustering and sorting in a document retrieval interface](#) [\(PDF\) from dbkgroup.org](#)
J Handl... - Parallel Problem Solving from Nature—PPSN VII, 2002 - Springer
... the query results by browsing the documents, which are accessed through a mouse click on their map **location**. ... with similar contents should be in close proximity, while differences in subject should be reflected by **spatial** distance. ... Improved Ant-**Based Clustering** and Sorting 915 ...
[Cited by 105](#) - [Related articles](#) - [SciDirect](#) - [All 3 versions](#)

[Mean shift based clustering in high dimensions: A texture classification example](#) [\(PDF\) from psu.edu](#)
B Georgescu, I Shimshoni... - Computer Vision, 2003. 2003 - [ieeexplore.ieee.org](#)
... search in high dimensions for general datasets [10, 11] and for **clustering data** [9, 14]. We use the approximate nearest neighbor algorithm **based** on locality-sensitive hashing (LSH) [7] and ... mean shift iterations (5) require a neighborhood query around the current **location** y. The ...
[Cited by 225](#) - [Related articles](#) - [All 26 versions](#)

[CHAPTER EIGHT The Moran scatterplot as an ESDA tool to assess local instability in spatial association](#)
L Anselin - **Spatial** analytical perspectives on GIS, 1996 - [books.google.com](#)
... lower left quadrants represent positive **spatial** association, in the sense that a **location** is surrounded ... The suggestion of **spatial clustering** that follows from a visual inspection of this map is ... This statistic is computed for a **spatial** weights matrix **based** on distance contiguity, using ...
[Cited by 403](#) - [Related articles](#) - [Library Search](#) - [All 3 versions](#)

[Spatial econometrics](#) [\(PDF\) from psu.edu](#)
L Anselin - A companion to theoretical econometrics, 1988 - Wiley Online Library
... Typically, they are **based** on the geographic arrange- ment of the observations, or contiguity. ... This is a full matrix, which implies that shocks at any **location** affect all other locations ... has a certain intuition, in the sense that it incorporates an explicit notion of **spatial clustering** as a ...
[Cited by 5171](#) - [Related articles](#) - [Library Search](#) - [All 31 versions](#)

[Peer-to-peer spatial queries in sensor networks](#) [\(PDF\) from psu.edu](#)
M Demirbas... - 2003 - [computer.org](#)
... Besides the **location-based** queries, the proposed framework can be utilized for other multi-dimensional queries over ... program that con- structs a hierarchical partitioning of a sensor network **based** on the ... to [n, N] (where N > 2^n) tolerance factor in our **clustering** program, LOCI ...
[Cited by 104](#) - [Related articles](#) - [All 22 versions](#)

[Plant size and clustering of manufacturing activity](#)
SH Sweeney... - Geographical Analysis, 1998 - Wiley Online Library
... set of studies by regional scientists of industrial complexes in the 1970s and a point pattern analysis of manufacturing **location** patterns in ... Given **data** with a suitably detailed **spatial** resolution, the most powerful statis- tical methods for examining **clustering** are **based** on the ...
[Cited by 49](#) - [Related articles](#) - [All 2 versions](#)

[Fine-scale mapping of disease genes with multiple mutations via spatial clustering techniques](#) [HTML from nih.gov](#)
J Molitor, P Marjoram... - The American Journal of Human ..., 2003 - Elsevier
... Furthermore, our **clustering** approach has the potential to allow us to detect the presence of multiple ... The metric is **based** upon the assertion that the difference was due to a mutation at ... Another modification would be to define a series of probabilities at each marker **location** p 1 ...
[Cited by 85](#) - [Related articles](#) - [SciDirect](#) - [All 2 versions](#)

[Spatial data mining: A database approach](#) [\(PDF\) from psu.edu](#)
M Ester, HP Kriegel... - Advances in **spatial** databases, 1997 - Springer
... extension. The explicit **location** and extension of objects define implicit relations of **spatial** neighborhood. ... objects. Step 4 is **based** on the neigh- borhood graphs for the special neighborhood relations, eg specialgraph 4.2 **Spatial Clustering Clustering** ...
[Cited by 223](#) - [Related articles](#) - [SciDirect](#) - [All 24 versions](#)

[An optimal graph theoretic approach to data clustering: Theory and its application to image segmentation](#) [\(PDF\) from sc.edu](#)
Z Wu... - IEEE transactions on pattern analysis and machine ..., 1993 - [computer.org](#)
... computed feature vectors together. Often little or no **spatial** information about the image is used. Here a new method for image segmentation is developed **based** on our **clustering** algorithm. This method effectively searches ...
[Cited by 563](#) - [Related articles](#) - [SciDirect](#) - [All 22 versions](#)

[\(PDF\) Distributed clustering and local regression for knowledge discovery in multiple spatial databases](#) [\(PDF\) from psu.edu](#)
A Lazarevic, D Pokrajac... - Proceedings of 8th European ..., 2000 - Citeseer
... The proposed method is shown to be computationally efficient and fairly accurate when compared to an approach where all the **data** are available at a central **location**. ... 5. Sander J., Ester M., Kriegel H.-P., Xu X.: "Density-**Based Clustering** in **Spatial** Databases: The Algorithm ...
[Cited by 31](#) - [Related articles](#) - [View on IJIMM](#) - [All 12 versions](#)

[PDF] [Algorithms and applications for **spatial data** mining](#)

[PDF] from psu.edu

M Ester, HP Kriegel... - Geographic Data Mining and Knowledge ..., 2001 - Citeseer
... traffic control or environmental studies. A **spatial** database contains objects which are characterized by a **spatial location** and/or exten- ... We can support **clustering** algorithms by our database primitives if the **clustering** algorithm is **based** on ...
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[The **spatial** patterning of county homicide rates: An application of exploratory **spatial data** analysis](#)

[PDF] from wisn.edu

SF Messner, L Anselin, RD Baier... - Journal of Quantitative ..., 1999 - Springer
... research has demonstrated convinc- ingly that knowledge about the **location** of criminal ... a nonrandom geographic distribution.7 The present paper examines **spatial clustering** of homicide ... Our analyses are **based** on the newly developed methodology of exploratory **spatial data** ...
[Cited by 138](#) - [Related articles](#) - [Bi Direct](#) - [All 10 versions](#)

[PDF] [A new method to measure **spatial** association for ecological count **data**](#)

[PDF] from bbsrc.ac.uk

JN Perry... - Ecoscience, 2002 - rothamsted.bbsrc.ac.uk
... The new measure is **based** on a comparison of the **spatial** SADIE **clustering** index of the two sets ... coefficient between the **clustering** indices of the two sets. The randomization method allows ... their co-**location** in particular subareas of each plot. ...
[Cited by 107](#) - [Related articles](#) - [View as HTML](#) - [Bi Direct](#) - [All 4 versions](#)

[PDF] [Spatial **data** mining: progress and challenges survey paper](#)

[PDF] from psu.edu

K Koperski, J Adhikary... - ... Workshop on Research Issues on Data ..., 1996 - Citeseer
... be described using two diff erent properties, geometric and topological. For example, geometric properties can be **spatial location**, area, perimeter ... As for the efficiency concern, a new algorithm, called CL ARANS (**Clustering** large Applications **based** uponRANDOM- ized ...
[Cited by 166](#) - [Related articles](#) - [View as HTML](#) - [All 10 versions](#)

[CITATION] Exploratory **spatial data** analysis and geographic information systems

L Anselin - New tools for **spatial** analysis, 1994 - Luxembourg: Eurostat
[Cited by 79](#) - [Related articles](#) - [All 2 versions](#)

[PDF] [Discovery of general knowledge in large **spatial** databases](#)

[PDF] from psu.edu

W Lu, J Han, BC Ooi - Proc. Far East Workshop on Geographic ..., 1993 - Citeseer
... in raster **data** is represented by <(x, y), intensity>, where (x, y) is the **spatial location** and intensity the nonspatial attribute value. ... Different from relational **data clustering**, which is usually **based** on the concept hierarchy of each single attribute, **spatial data clustering** is two ...
[Cited by 124](#) - [Related articles](#) - [View as HTML](#) - [All 10 versions](#)

[Color image segmentation using density-**based clustering**](#)

O Ye, W Gao... - icme, 2003 - computer.org
... Considering that an image can be regarded as a dataset in which each pixel has a **spatial location** and a color value, color image ... To discover the **spatial** connectivity of the pixels, density-**based clustering** is employed, which is an effective **clustering** method used in ...
[Cited by 43](#) - [Related articles](#) - [Bi Direct](#) - [All 11 versions](#)

[Local maximum filtering for the extraction of tree locations and basal area from high **spatial** resolution imagery](#)

M Wulder, KO Niemann... - Remote Sensing of ..., 2000 - Elsevier
... The ability to directly estimate the **location** of trees may improve estimates of stand density, volume, basal area, and canopy closure compared to estimates **based** on lower ... template matching (Pollock, 1999), morphology (Barbezat and Jacot, 1999), and **clustering** (Culvenor et al ...
[Cited by 142](#) - [Related articles](#) - [Bi Direct](#) - [All 7 versions](#)

[Spatial **data** management on a very large cadastral database](#)

[PDF] from gdmc.nl

PJM Van Oosterom, CHJ Lemmen - Computers, Environment and Urban ..., 2001 - Elsevier
... highlights some innovative developments during the design of this database, eg the **Spatial Location** Code for ... unique object identifiers, integration of geometric and thematic attributes in one table, **spatial clustering**, **spatial** indexing, SQL **based** product development ...
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[How many clusters? Which **clustering** method? Answers via model-**based** cluster analysis](#)

[PDF] from psu.edu

C Fraley... - The computer journal, 1998 - Br Computer Soc
... An alternative is described in this paper. 2.2. Probability models for cluster analysis In model-**based clustering**, it is assumed that the **data** are generated by a mixture of underlying probability distributions in which each component represents a different group or cluster. ...
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[SPRING: Integrating remote sensing and GIS by object-oriented **data** modelling](#)

[PDF] from psu.edu

G Câmara, RCM Souza, UM Freitas... - Computers & graphics, 1996 - Elsevier
... geocoding can be made by means of ground control point **location**, and images ... SPRING uses a segmentation algorithm which is **based** on regiongrowing methods [8 ... the segmentation is performed, various region classifiers can be executed: **clustering**, maximumlikelihood and ...
[Cited by 601](#) - [Related articles](#) - [Bi Direct](#) - [All 8 versions](#)

[A unified approach to detecting **spatial** outliers](#)

[PDF from paul.edu](#)

S Shekhar, CT Lu... - Geoinformatica, 2003 - Springer

... outlier-degree of an object is determined by taking into account the **clustering** structure in ... as shown in figure 1(b). **Spatial** attributes are used to characterize **location**, neighborhood, and ... Graphical tests are **based** on the visualization of **spatial data** which highlights **spatial** outliers ...

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[A test for the coincident economic and **spatial** clustering of business enterprises](#)

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EJ Feser ... - Journal of Geographical Systems, 2000 - Springer

... as an in" uence on industrial concentration from the in" uence of general **location** advantages related to ... paper, we outline a method for accomplishing this that joins input-output **based** analysis of economic **clustering** with statis- tical methods for investigating **spatial clustering**. ...

[Cited by 66](#) - [Related articles](#) - [BL Direct](#) - [All 6 versions](#)

[Soil-landscape modelling using fuzzy c-means **clustering** of attribute **data** derived from a Digital Elevation Model \(DEM\)](#)

S De Bruin... - Geoderma, 1998 - Elsevier

... 2. **Location** of the sample points in UTM projection ... Since all these measures are **based** on information obtained from within the **clustering** process itself, they are so-called ... Conversely, external criterion analysis is **based** on variables not used in the cluster analysis (Milligan, 1996 ...

[Cited by 79](#) - [Related articles](#) - [All 5 versions](#)

[Extracting **spatial** knowledge from the web](#)

[PDF from psu.edu](#)

Y Monmoto, M Aono, ME Houle ... - Applications and the ..., 2003 - ieeexplore.ieee.org

... The **clustering** method was applied to uniform random sam- ples drawn from S, of size |S| 2i ... titles of 70 nearest web pages from the query element at which the clus- ter is **based**. ... We associate the keywords with web pages that contain **location** information to create a geospatial ...

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[\[PDF\] Forecasting rural land-use change: a comparison of regression-and **spatial** transition-based models](#)

[PDF from colostate.edu](#)

DM Theobald... - Geographical and Environmental ..., 1998 - nrel.colostate.edu

... Actions such as **clustering** alter the footprint or **location** of development while maintaining or even ... Planning actions that modify the **location** of development can also modify the PD[t + 1 ... In the regression-**based** model, the **spatial** linear regression results in a map of probability of ...

[Cited by 66](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

[Methods, apparatus and **data** structures for providing a user interface, which exploits **spatial** memory, to objects](#)

M Czerwinski, ST Durnais, SE Dziadosz... - US Patent ..., 2001 - Google Patents

... Intelligent help may be provided to the user, as visual indicators, **based** on proximity **clustering** or **based** on matching ... 00 1— CO CD co co CM CO o CO 00 o co CD O CO "PUSHED" FLAG "MOVE" FLAG "SELECT" FLAG Lu > <2 "ACTI FLA PRE-PUSH **LOCATION** NO LOCATI ...

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[Exploratory **spatial data** analysis of the distribution of regional per capita GDP in Europe, 1980–1995](#)

[PDF from u-bourgogne.fr](#)

J Gallo... - Papers in regional science, 2003 - Wiley Online Library

... are located in the European Union and the way this pattern of **location** has changed ... it cannot discriminate between a **spatial clustering** of high values and a **spatial clustering** of low ... Inference is **based** on the normal asymptotic approximation as suggested by Ord and Getis (1995 ...

[Cited by 251](#) - [Related articles](#) - [BL Direct](#) - [All 18 versions](#)

[Second-order analysis of space-time **clustering**](#)

PJ Diggle, AG Christwynd... - Statistical methods in ..., 1995 - smm.sagepub.com

... For example, the **location** of a case might be taken as the principal residence of the ... Our analysis is **based** on the second-order properties of a general stationary, **spatial**- temporal ... scales, whether for estimation purposes or to construct an omnibus test of space-time **clustering**. ...

[Cited by 118](#) - [Related articles](#) - [Library Search](#) - [All 5 versions](#)

[Opening the black box: interactive hierarchical **clustering** for multivariate **spatial** patterns](#)

[PDF from psu.edu](#)

D Guo, D Peuquet... - Proceedings of the 10th ACM ..., 2002 - portal.acm.org

... The input is a set of 2-D points $V = \{v_1, v_2, \dots, v_n\}$, where $v_i = \langle x, y \rangle$ is a **location** in the ... 7] Estivill-Castro, V. and Lee, I., Amoeba: Hierarchical **Clustering Based On Spatial** Proximity Using Delaunaty Diagram., 9th International Symposium on **Spatial Data** Handling, Beijing ...

[Cited by 26](#) - [Related articles](#) - [All 2 versions](#)

[Path **based** pairwise **data** clustering with application to texture segmentation](#)

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B Fischer, T Zöfner... - ... Methods in Computer Vision and Pattern ..., 2001 - Springer

... the resulting twelve dimensional vector of modulus values $l(x)$ for each image **location** x comprises ... Although $l(x)$ contains information about **spatial** relations of pixels in the neighborhood of x , it ... 5. Results of the novel path **based clustering** criterion on three toy **data** sets: a) arcs b ...

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[Algorithm for **data** clustering in pattern recognition problems **based** on quantum mechanics](#)

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D Horn... - Physical Review Letters, 2001 - APS

... that they lie at high values (of order E). Classifying **data** points to clusters according to their topographic **location** on the 3 ... raw **data** in four dimensions, leading to misclassifications of the order of 15 instances, similar to the **clustering** quality of [4]. Distance-**based** QC formulation ...
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The analysis of **spatial** association by use of distance statistics

A Getis... - Geographical analysis, 1992 - Wiley Online Library

... xj values in the vicinity of point i differ systematically from the mean is there the opportunity to identify significant **spatial** concentration of ... The statistic is general in the sense that it is **based** on all pairs of values (xi, xj) such that i and j are ... No particular **location** i is fixed in this case. ...
[Cited by 560](#) - [Related articles](#) - [All 3 versions](#)

[PDF] Integrating GIS and **spatial data** analysis: problems and possibilities^

M Goodchild - Environment, 1987 - geog.ucsb.edu

... In a **spatial** database errors arise in measuring both **location** and attribute properties ... a 'dragging windows' utility for exploratory analysis, particularly in large object-**based spatial data** sets (Haslett ... with others at Lancaster University, on the detection of **spatial clustering** in cancer ...
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[PDF] The world in your pocket-towards a mobile cartography

T Reichenbacher - Proceedings of the 20th International Cartographic ..., 2001 - Citeseer

... are many different techniques: Bayesian (probabilistic), logic **based**, ML techniques, **clustering**, stereotype-**based** ... For a start the categorisation could be **based** on the user's information requests or ... context of this **location**, checking for events happening at this **location** and finding ...
[Cited by 54](#) - [Related articles](#) - [View as HTML](#) - [All 3 versions](#)

The **spatial clustering** of science and capital: Accounting for biotech firm-venture capital relationships

WW Powell, KW Koput, JJ Bowie... - Regional Studies, 2002 - Taylor & Francis

... Page 3. The **Spatial Clustering** of Science and Capital 293 ... is a major research centre, the Center for Disease Control, a technology-**based** university, Georgia Tech, graphic concentration of the production **location**, why does the propensity for innovative activity to cluster ...
[Cited by 204](#) - [Related articles](#) - [BL Direct](#) - [All 15 versions](#)

Density-connected sets and their application for trend detection in **spatial** databases

M Ester, HP Kriegel, J Sander... - ... on Knowledge Discovery and Data ..., 1997 - aaai.org

... A differ- ewe-**based** method calculates the difference of both, the ob- served influence region and the theoretical circular region, thus returning some region indicating the **location** of a possible deviation (see figure 2). An ... Density-**Based Clustering** in **Spatial** Databases: The ...
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[PDF] Inferring urban land use from satellite sensor images using kernel-**based spatial** reclassification

MJ Barnsley... - Photogrammetric Engineering and Remote ..., 1996 - asprs.org

... classes in a somewhat arbitrary and unpredictable manner, depending on the **location** of the ... by Wharton (1982a; 1982b) provides an early example of kernel-**based spatial** re-classification ... of the kernel is derived using an unsupervised, non-parametric **clustering** procedure ...
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[PDF] Algorithms for mining distance-**based** outliers in large datasets

EM Knorr... - ... of the International Conference on Very Large Data ..., 1998 - Citeseer

... it is the exceptional cases[exceptional perhaps in monetary amount, type of purchase, timeframe, **location**, or some ... indirectly through the notion of clusters, and they are developed only to optimize **clustering**, but not ... 1.2 Distance-**Based** Outliers and Contributions of this Paper ...
[Cited by 557](#) - [Related articles](#) - [View as HTML](#) - [BL Direct](#) - [All 12 versions](#)

Geonotes: Social and navigational aspects of **location-based** information systems

F Espinoza, P Persson, A Sandin... - Ubicomp 2001: ..., 2001 - Springer

... we allow the user to regulate the tradeoff between curiosity about the **spatial** annotations and ... who bought the same books that you bought, also bought this one!' **Clustering** users into ... In conclusion, our proposal for a **location-based** information system is social in two respects. ...
[Cited by 251](#) - [Related articles](#) - [BL Direct](#) - [All 27 versions](#)

Nonparametric maximum likelihood estimation of features in **spatial** point processes using Voronoi tessellation

D Allard... - Journal of the American Statistical Association, 1997 - JSTOR

... is derived using a natural partition of the space defined by the **data** themselves: the ... The methodology is tested on simulations and compared to a model-**based clustering** technique ... INTRODUCTION The problem of contouring clusters of points belonging to a **spatial** point process ...
[Cited by 65](#) - [Related articles](#) - [BL Direct](#) - [All 22 versions](#)

Fuzzy image **clustering** incorporating **spatial** continuity

AWC Liew, SH Leung... - Vision, Image and Signal ..., 2000 - ieeexplore.ieee.org

... For pixel at **location** (i, s), $8(r, T), (-1, s)$ gives the Euclidean distance between feature vectors x ... We next perform colour-**based** image segmentation on some real colour images using our algorithm. ... The **clustering** is then done in the CIELAB space using the L, a and b colour compo ...

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An introduction to multisensor **data** fusion

[\[PDF\] from hhu.de](#)

DL Hall... - Proceedings of the IEEE, 1997 - [ieeexplore.ieee.org](#)
... combined into a single concatenate- nated feature vector which is input to pattern recognition approaches **based** on neural networks, **clustering** algorithms, or ... of sensor information, after each sensor has made a preliminary deter- mination of an entity's **location**, attributes, and ...
[Cited by 913](#) - [Related articles](#) - [Bib. Direct](#) - [All 9 versions](#)

[PDF] A **spatial** scan statistic

[\[PDF\] from satscan.org](#)

M Kulldorf... - Communications in statistics: theory and methods, 1997 - [satscan.org](#)
... $M = \sup_{\gamma \in \mathcal{C}} \sum_{i \in \gamma} \log \frac{p(\mathbf{y}_i | \gamma)}{p(\mathbf{y}_i)}$... A similar argument holds for the Bernoulli case, **based** on equation ... The **location** of county seats were used as the geographical coordinates. ... **Spatial clustering** for inhomogeneous popu- lations ...
[Cited by 1092](#) - [Related articles](#) - [Bib. Direct](#) - [All 8 versions](#)

Distance and risk measures for the analysis of **spatial data**: a study of childhood cancers

S Selvin, J Schuman... - Social Science & Medicine, 1992 - Elsevier
... of no association can be stated two ways: (a) all individuals are at equal risk regardless of their **location** on a ... cases occurring far from a point source of exposure diminish the power of an analysis **based** on distance ... geopolitical or transformed map) to detect **spatial clustering**. ...
[Cited by 63](#) - [Related articles](#) - [All 11 versions](#)

Local **spatial** statistics: an overview

A Getis... - Spatial analysis: Modelling in a GIS ..., 1996 - [books.google.com](#)
... and t_{ij} , are elements of matrices W and Y , and the focus is on the value of T at **location** i . The ... The first is **based** on covariance, the next three on differences, and the G_i statistics evaluate association by measuring ... We have identified the nature of the **clustering** in the vicinity of x_i ...
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Linear flaw detection in woven textiles using model-**based clustering**

[\[PDF\] from washington.edu](#)

JG Campbell, C Fraley, F Murtagh... - Pattern Recognition Letters, 1997 - Elsevier
... Textiles; Image processing; Computer vision; Inspection; Linear flaw detection; Model **based clustering**; Bayes factor ... significant scope for introducing intelligence to these phases: if **location** of automatically ... but which, due to their occurrence in an extended **spatial** pattern, are ...
[Cited by 72](#) - [Related articles](#) - [All 17 versions](#)

A unified framework for model-**based clustering**

[\[PDF\] from csu.edu](#)

S Zhong... - The Journal of Machine Learning Research, 2003 - [portal.acm.org](#)
... The basic idea is that each **data** object is stochastically (and entirely, not fractionally) assigned to one of the K ... batch version of the SOM and Neural-Gas algorithms in the con- text of model-**based clustering** and show ... Let the map **location** of cluster y be ϕ_y and $K\alpha(\phi_y, \phi_x) = \exp ...$
[Cited by 168](#) - [Related articles](#) - [Bib. Direct](#) - [All 23 versions](#)

Spatial and feature space **clustering**: Applications in image analysis

[\[PDF\] from psu.edu](#)

J Matas... - Computer Analysis of Images and Patterns, 1995 - Springer
... For comparison with the segmentation approach **based** on edge detection the image was first filtered with ... At some pixel **location** the depth measurements are not available ... We have proposed a novel approach to image segmentation, called feature and **spatial** domain **clustering**. ...
[Cited by 46](#) - [Related articles](#) - [All 17 versions](#)

Use of **spatial** statistics and monitoring **data** to identify **clustering** of bovine tuberculosis in Argentina

AM Perez, MP Ward, P Torres... - Preventive Veterinary Medicine, 2002 - Elsevier
... objectively determine if TB was clustered in Argentine cattle herds, and to identify the **location** of the most-likely clusters of bovine TB in Argentina **based** on 2 ... Study results support previously suspected **clustering** of TB in dairying districts of Argentina (PAHO/WHO, 1982) and ...
[Cited by 31](#) - [Related articles](#) - [All 2 versions](#)

Segmented trajectory **based** indexing and retrieval of video **data**

[\[PDF\] from psu.edu](#)

FI Bashir, AA Khokhar... - Image Processing, 2003. ..., 2003 - [ieeexplore.ieee.org](#)
... follows in an effort to reduce the size (number of items) of **data** set. ... to lie in the 0 to 1 range to make the representation invariant to object's **spatial location**. 2.2.2. Polynomial Coefficients **based Clustering** Instead of computing PCs from subtrajectories, **clustering** is first performed ...
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Towards geo-**spatial** hypermedia: Concepts and prototype implementation

[\[PDF\] from csu.edu](#)

K Grenbæk, PP Vestergaard... - Proceedings of the ..., 2002 - [portal.acm.org](#)
... 7.2 The role of **spatial** parsing in geo-**spatial** hypermedia The Topos system includes a **spatial** parser [21] **based** on 3D proximity analysis. ... Here the placement of objects is typically tied to a specific **location**, and abstract **clustering** and automatic arrangement may potentially ...
[Cited by 50](#) - [Related articles](#) - [All 31 versions](#)

Multi-actor-**based** land use modelling: **spatial** planning using agents

A Ligtenberg, AK Bregt... - Landscape and Urban ..., 2001 - Elsevier
... after the claim is fulfilled or a situation is reached in which no **location** exists where ... The


implementation of SWARM is **based** upon the definition of so-called Modelswarms and ... The "Municipality of Nijmegen" for example prefers a **clustering** of new urbanisation close to existing ...
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Using the fractal dimension to cluster datasets [PDF] from psu.edu
D Barbara... - ... conference on Knowledge discovery and data ..., 2000 - portal.acm.org
... Then, the information kept is not the actual **location** of points in the boxes, but rather, the number of points in each box. ... The second one is **based** on discarding low-populated boxes. ... WaveCluster: A Multi-Resolution **Clustering** Approach for Very Large **Spatial** Databases. ...
[Cited by 14](#) - [Related articles](#) - [All 13 versions](#)

It's about time: A conceptual framework for the representation of temporal dynamics in geographic information systems
DJ Pequet - Annals of the Association of American ..., 1994 - Wiley Online Library
... is object-**based** in the sense that all in- formation, coordinate as well as non-**spatial** at- tribute information, is stored relative to specific geographic/cartographic objects, or features (roads, census tracts, etc.).* The raster or grid **data** model, conversely, is **location-based** in the ...
[Cited by 302](#) - [Related articles](#) - [All 5 versions](#)

An approach to active spatial data mining based on statistical information [PDF] from psu.edu
W Wang, J Yang... - Knowledge and Data Engineering ..., 2000 - ieeeexplors.ieee.org
... Triggers specified in terms of changes to clusters (area, density, **location**, etc.) may be used to ...
WANG ET AL.: AN APPROACH TO ACTIVE SPATIAL DATA MINING **BASED** ON STATISTICAL ...
An algorithm for incremental **clustering** for mining in a **data** warehousing environment is ...
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A data mining approach for spatial modeling in small area load forecast
HC Wu... - Power Systems, IEEE Transactions on, 2002 - ieeeexplore.ieee.org
... calculus and/or significant specific domain knowledge [1]. The forecasting of the **location** for future ...
B. **Data** Conversion Preference scores in the training set are computed **based** on historical ... The first step (KD1) uses a **clustering** technique to de- termine the major combinative ...
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